



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2016-3992; Directorate Identifier 2015-NM-075-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 787-8 airplanes. This proposed AD was prompted by a report that a captain's seat moved uncommanded during a landing rollout due to a failure in the seat horizontal actuator. This proposed AD would require repetitive tests of the captain and first officer seat assemblies for proper operation, and corrective action if necessary. This proposed AD would also require installing new captain and first officer seat assemblies, which would terminate the repetitive tests. We are proposing this AD to prevent a seat actuator clutch failure, which could result in a loss of seat locking and uncommanded motion of the captain's or first officer's seat; uncommanded seat movement could result in reduced controllability of the airplane.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. It is also available on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-3992.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-3992; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Brandon Lucero, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle

Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356;  
phone: 425-917-6572; fax: 425-917-6590.

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2016-3992; Directorate Identifier 2015-NM-075-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

This proposed AD was prompted by a report that a captain's seat moved uncommanded during a landing rollout due to a failure in the seat horizontal actuator. Investigation found press fit clutch pins in the actuator could migrate loose when subjected to repeated dynamic impact loading from clutch re-engagement when the manual horizontal control lever is released with the seat still moving on the tracks. The clutch pins can migrate loose, overturn, and force clutch plate separation, resulting in degraded or failed seat locking.

We are proposing this AD to prevent a seat actuator clutch failure, which could result in a loss of seat locking and uncommanded motion of the captain's or first officer's seat; uncommanded seat movement could result in reduced controllability of the airplane.

#### **Related Service Information under 1 CFR part 51**

We reviewed Boeing Alert Service Bulletin B787-81205-SB250054-00, Issue 001, dated December 19, 2014. This service information provides procedures for installation of new captain and first officer seat assemblies, a test of the captain and first officer seat assemblies, and corrective action if necessary. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

#### **Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in the service information described previously. For information on the procedures and compliance times, see this service information at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-3992.

The phrase "corrective actions" is used in this proposed AD. "Corrective actions" are actions that correct or address any condition found. Corrective actions in an AD could include, for example, repairs.

## Costs of Compliance

We estimate that this proposed AD affects 18 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

### Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Operational test	2 work-hours X \$85 per hour = \$170 per test cycle	\$0	\$170 per test cycle	\$3060
Seat assembly installation	3 work-hours X \$85 per hour = \$255 to replace two seats	\$15,141 per seat X 2 seats = \$30,282	\$30,537 to replace two seats	\$549,666

We estimate the following costs to do any necessary corrective actions that would be required based on the results of the proposed operational tests. We have no way of determining the number of aircraft that might need these actions:

### On-condition costs

Action	Labor cost	Parts cost	Cost per product
Replacement of captain seat vertical actuator	2 work-hours X \$85 per hour = \$170	\$7,500	\$7,670
Replacement of captain seat horizontal actuator	2 work-hours X \$85 per hour = \$170	\$7,500	\$7,670
Replacement of first officer seat vertical actuator	2 work-hours X \$85 per hour = \$170	\$7,500	\$7,670
Replacement of first officer seat horizontal actuator	2 work-hours X \$85 per hour = \$170	\$7,500	\$7,670

## Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska; and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**The Boeing Company:** Docket No. FAA-2016-3992; Directorate Identifier 2015-NM-075-AD.

#### **(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to The Boeing Company Model 787-8 airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin B787-81205-SB250054-00, Issue 001, dated December 19, 2014.

**(d) Subject**

Air Transport Association (ATA) of America Code 25, Equipment/furnishings.

**(e) Unsafe Condition**

This AD was prompted by a report that a captain's seat moved uncommanded during a landing rollout due to a failure in the seat horizontal actuator. We are issuing this AD to prevent a seat actuator clutch failure, which could result in a loss of seat locking and uncommanded motion of the captain's or first officer's seat; uncommanded seat motion could result in reduced controllability of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Repetitive Tests of Captain and First Officer Seat Assembly Operation**

Within 1,000 flight hours after the effective date of this AD, test the operation of the captain and first officer seat assemblies and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB250054-00, Issue 001, dated December 19, 2014. Do all applicable corrective actions before further flight. Repeat the operational test thereafter at intervals not to exceed 1,000 flight hours until the installation required by paragraph (h) of this AD is done.

**(h) New Seat Installation**

Within 72 months after the effective date of this AD, do the actions specified in paragraphs (h)(1) and (h)(2) of this AD, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB250054-00, Issue 001, dated December 19, 2014. Installing the seat specified in paragraph (h)(1) or (h)(2) of this



AD is terminating action for the repetitive operational tests required by paragraph (g) of this AD for that seat only.

(1) Install new captain seat assembly, part number (P/N) 3A380-0007-01-7.

(2) Install new first officer seat assembly, P/N 3A380-0008-01-7.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle Aircraft Certification Office, ANM-150S, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (j)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (i)(4)(i) and (i)(4)(ii) of this AD, apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

**(j) Related Information**

(1) For more information about this AD, contact Brandon Lucero, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6572; fax: 425-917-6590.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on February 23, 2016.

Dionne Palermo,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2016-04679 Filed: 3/4/2016 8:45 am; Publication Date: 3/7/2016]